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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/935,779

08/24/2001

Frampton E. Ellis

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9048

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7590

01/29/2007

DLA PIPER US LLP

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RESTON, VA 20195

EXAMINER

REILLY, SEAN M

ART UNIT

PAPER NUMBER

2153

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/29/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/935,779	ELLIS	
	Examiner	Art Unit	
	Sean Reilly	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35-49 is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/12/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 2153

### **DETAILED ACTION**

Another Examiner has been assigned to this application.

This Office action is in response to Applicant's amendment and request for reconsideration filed on April 17, 2001 and the 105 response filed on September 19, 2006. Claims 1-49 are presented for further examination.

### ***Response to Arguments***

Applicant's argument are noted however they are moot in view of the new grounds of rejection set forth.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on December 12, 2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Terminal Disclaimers***

The terminal disclaimers filed on April 17, 2006 are accepted and entered into the record. All previous double patenting rejections have been removed.

### ***Claim Rejections - 35 USC § 103***

Art Unit: 2153

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

**Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

**Rosenberry US patent 5,349,682 and further in view of**

**Grabon, US patent 5,943,421;**

**Wade et al., US patent 5,872,987;**

**Hortensius et al. US patent 5,917,629;**

**Chen, US patent 5,809,190;**

**Taaffe, US patent 4,747,139;**

**Kean, US patent 5,600,597;**

**Slater, "The Microprocessor Today."**

**Steinert-Threlkeld, "NEW BREED OF CHIP TI develops a super circuit;" and**

**Applicant's admitted prior art.**

Rosenberry teaches a network system for shared processing.

In the field of sharing computer resources over a network, Grabon teaches a hardware and firmware firewall for regulating access to resources from another computer (col.8 lines 43-55).

Hence, it would have been obvious for one of ordinary skill in the art to have a firewall to protect the PC from malicious or unauthorized access. Hence, it would have been obvious for one of ordinary skill in the art to provide Rosenberry with a firewall to protect certain memory

Art Unit: 2153

hardware and permit access to other memory hardware because it would have prevented unauthorized access and corruption of nonshared memory and thereby improved the security of the personal computer being used for shared processing.

Hortensius discloses a system for integrate a wireless network with a wired network.

Hortensius discloses that wireless local area network which facilitate direct coupling of to PC's are well known in the art at the time of the invention [see col.1 lines 21-25]. It would have been obvious for one of ordinary skill in the art to use wireless network system such as that taught by Hortensius because it would have provided low cost mobile computers connection and compatibility with wired network [Hortensius col. lines 19-36].

Chen discloses that DWDM raises the communication capacity to 2.5 Gb/s without additional construction to the telecommunication infrastructure. Hence, it would have been obvious for one of ordinary skill in the art to use DWDM because it would have provide high communication bandwidth.

Slater discusses the state of the art of microprocessor design in 1996. Slater discloses reducing system cost by integrating more functions on a chip and microprocessors are evolving toward system on a chip. Slater teaches to integrate video, graphic and other component on the same chip as the microprocessor. (See pages 42-43). Furthermore this concept of system-on-a-chip and its benefits were widely known well before 1996, dating back to at least 1992, see Steinert-Threlkeld, "NEW BREED OF CHIP TI develops a super circuit" pages 1-2 and in particular pg 2 ¶s 3-5, "TI will be trying to squeeze onto a single chip most if not all of the contents of the main printed circuit board in a personal computer." Also Applicant himself admits that the concept of placing all the components of a PC onto a single chip was widely known in the art at the time of

Art Unit: 2153

Applicant's invention (See Applicant's CIP parent patent 6,732,141, Col 15, lines 34-43). Hence, it would have been obvious for one of ordinary skill in the art at the time of the invention to put all components of a PC onto a microchip because it would have provided a PC that results in more speed, less weight, and less power consumption in a smaller space (see inter alia, Steinert-Threlkeld pg 2, ¶ 4). Slater further discloses uses of microprocessor in video games, automobile, and other consumer electronics.

Wade teaches a computer with plural processing units and a controller to control the processing units [see abstract lines 1-5, col.1 lines 38-45]. It would have been obvious for one of ordinary skill in the art to use a computer having multiple processors, as disclosed by Wade, with Robertazzi system because it would have provided a large amount of processing power for load sharing. Furthermore one of ordinary skill in the art would understand that the number of processors required would vary based on the processing capacity required for various tasks. Thus, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include any number of processors, including 2, 4, 8, 16, 32, 64, 128, 256, 512, or 1024, as required. Furthermore it would have been obvious for one of ordinary skill in the art to provide the components of the PC on a microchip because it would have provided a compact computer system and reduced cost as discussed above with regard to Slater, Steinert-Threlkeld, and Applicant's admitted prior art.

Taaffe teaches a single chip microprocessor for encryption [see col.1 lines 35-68]. It would have been obvious for one of ordinary skill in the art to incorporate an encryption component into the microchip because it would have provided integrated protection of software and data.

Art Unit: 2153

Kean discloses usage of FPGA in conjunction with microprocessor to provide logic function and configuration memory is known (col.2 line 40-45). Kean provides protection mechanism to prevent overwritten of the FPGA registers (col.2 lines 50-55). Hence, it would have been obvious for one of ordinary skill in the art to have Kean FPGA in PC of Robertazzi for the advantage state.

Therefore the references together teaches:

For claim 1, Rosenberry discloses a system comprising:

at least two personal computers [col.3 lines 7-28];

means for providing network services including shared computer processing to be provided to said at least two personal computers within said network [col.3 lines 29-45];

means for at least one of the computer, when idled by a personal user to be made available temporarily to provide said shared computer processing to said network [col.3 lines 50-59].

Rosenberry does not specifically disclose a firewall for denying access to a first memory hardware and permitting access to a second memory hardware.

In similar field of invention of sharing resources, Grabon teaches a hardware and firmware firewall for regulating access to resources from another computer (col.8 lines 43-55). Hence, it would have been obvious for one of ordinary skill in the art to provide Rosenberry with a firewall to protect certain memory hardware and permit access to other memory hardware because it would have prevent unauthorized access and corruption of nonshared memory and thereby improved the security of the personal computer being used for shared processing. It

Art Unit: 2153

would have been obvious for one of ordinary skill in the art to have plurality of firewalls because it would have improved the reliability of the system by providing redundancy.

Wade teaches a computer with plural processing units and a controller to control the processing units [see abstract lines 1-5, col.1 lines 38-45]. It would have been obvious for one of ordinary skill in the art to use a computer having multiple processors, as disclosed by Wade, with Robertazzi system because it would have provided a large amount of processing power for load sharing. Furthermore one of ordinary skill in the art would understand that the number of processors required would vary based on the processing capacity required for various tasks. Thus, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include any number of processors, including 2, 4, 8, 16, 32, 64, 128, 256, 512, or 1024, as required. Furthermore it would have been obvious for one of ordinary skill in the art to provide the components of the PC on a microchip because it would have provided a compact computer system and reduced cost as discussed above with regard to Slater, Steinert-Threlkeld, and Applicant's admitted prior art.

As per the various limitations recited in claims 4-34, they are apparent or would have been an obvious variation from the teaching of Rosenberry and the references cited. The motivation for combining the references are as stated prior.

***Allowable Subject Matter***

Claims 35-49 are allowed for the reasons set forth by Primary Examiner Dinh in the non-final action mailed on October 18, 2005.



*Conclusion*

The prior art made of record, in PTO-892 form, and not relied upon is considered pertinent to applicant's disclosure.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

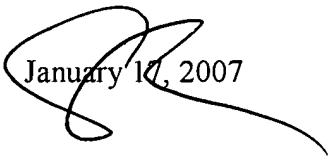
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Reilly whose telephone number is 571-272-4228. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2153

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



January 17, 2007



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